Textbook: *Physics* by Giancoli				***SP212 Course Outline****		***Spring 2002***
LESSON NUMBER	SCHEDULE	TEXT CH	TEXT SEC	TOPIC	LAB	MATH REVIEW**
1	Week 1			Admin., Introduction	Week 1: Intro to	
2	(7-11 Jan.)	21	1-4	History, Charges, Insulators, Conductors	to Electrical	
3			5	Coulomb's law	Measurements	
4	Week 2		6-8	The Electric Field		
5	(14-18 Jan.)		9-11	Motion of Electric Charges, Electric Dipoles	Week 2: Open	
6		22	1	Electric Flux		
	Week 3			*M. L. King Birthday*	Week 3:	
7	(21-25 Jan.)		2-3	Gauss's Law	Equipotentials	13.6, 13.8
8		23	1,2,7	Electric Potential and Electric Fields		
9	Week 4		3-4	Electric Potential Calcuations	Week 4:	
10	(28 Jan.-1 Feb.)		5,6,8	Electrostatic Potential Energy	DC Circuits	
11			demo	Michelson Room 117		
12	Week 5	24	1-3	Capacitance, Combinations of Capacitors	Week 5:	
13	(4-8 Feb.)		4-5	Electric Energy Storage, Dielectrics	Kirchhoff's Rules	
14		25	1-4	Ohm's Law, Resistivity		
15	Week 6		5-7,10	Electric Power and Practical Electricity	Week 6:	
16	(11-15 Feb.)	26	1-2	Equivalent Resistance	RC Circuits	
17			3	Kirchhoff's Rules		7.2
	Week 7			*Presidents' Day*	Week 7: Open	Web notes
	(18-22 Feb.)			*Six Week Grades Due*		
18				Time reserved for exam. Actual date TBA.		
19			4	RC Circuits		7.2
20	Week 8	27	1-3	Magnetic Fields and the Force on a Current	Week 8:	Web notes
21	(25 Feb.-1 Mar.)		4-5	Force on a Moving Charge, Torque	Magnetic Force	
22		28	1-2	Magnetic Field of and Force on Straight Wires		
23	Week 9		3-5	Ampere's Law	Week 9: Force	
24	(4-8 Mar.)	29	1-2	Faraday's Law	on Current	
25			demo	Michelson Room 117	Carrying Wires	
				Spring Break		
26	Week 10		3-4	Generators	Week 10:	
27	(18-22 Mar.)		6-7	Power Transmission, Electric Fields	Faraday's Law	
28		30	2-3	Self-Inductance, Energy Storage	and Inductance	
29	Week 11		4-5	LR and LC Circuits		7.2
30	(25-29 Mar.)	32	1-3	Maxwell's Equations	Week 11: Open	Web notes
31				Time reserved for exam. Actual date TBA		
32	Week 12		4-6	Production of EM Waves	Week 12:	
33	(1-5 Apr.)	33	1-3	Index of Refraction, Reflection	Thin Lenses	
34			4	Images formed by Spherical Mirrors		
35	Week 13		5-7	Snell's Law, Total Internal Reflection	Week 13: Open	
				Twelve Week Grades Due		
36	(8-12 Apr.)	34	1-3	Thin Lenses		
37			4-5	Lens Combinations, Lensmaker's Equation		
38	Week 14	35	1-3	Diffraction, Double-Slit Interference	Week 14:	
40	(15-19 Apr.)		6-7	Thin Films, Michelson Interferometer	Diffraction Grating	
39			demo	Michelson Room 117		
41	Week 15	36	1,3	Single Slit Interference	Week 15: Open	
42	(22-26 Apr.)		7	Diffraction Grating		
43			11	Polarization		
Week 16(29 Apr.-3 May)				*Review and Final Exams Begin*		

*The representative problems for the course are the alternate odd problems in the textbook e.g. problems 3, 7, 11,...

**MATH REVIEW refers to the text Calculus by J. Stewart and the URL http://www.usna.edu/MathDept/CDP/DE/toc.html